

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A circuit to drive a light source that includes a discharge tube, the circuit comprising:

a control device to drive the light source and to switch the light source to a plurality of lighting modes including a rated power mode and a power saving mode,

the control device including:

a lighting mode setting unit to set the lighting mode to one of the plurality of lighting modes; and

a rated power supplying unit to supply a rated power to the light source at a lighting starting time of the light source until a halogen cycle of the discharge tube is stabilized, and the control device switches the light source to the lighting mode set by the lighting mode setting unit after the halogen cycle of the discharge tube is stabilized,

the switching between the plurality of lighting modes being performed for one or more seconds.
2. (Canceled)
3. (Previously Presented) The circuit for driving the light source according to claim 1, the switching between the lighting modes being performed by gradually changing the power.
4. (Previously Presented) The circuit for driving the light source according to claim 1, the switching between the lighting modes being performed by linearly changing the power in switching.

5. (Previously Presented) The circuit for driving the light source according to claim 1, the switching between the lighting modes being performed by changing a rate of change of power with respect to time in a curvilinear fashion.

6. (Original) The circuit for driving the light source according to Claim 1, the circuit further including an inverter bridge to convert input direct current into alternating current.

7. (Currently Amended) A projector to modulate light beams emitted from a light source according to image information to form optical images, and to enlarge and ~~protect~~project the optical images, the projector comprising:

a circuit to drive a light source that includes a discharge tube, the circuit including:

a control device to drive the light source and to switch the light source to a plurality of lighting modes including a rated power mode and a power saving mode,

the control device including:

a lighting mode setting unit to set the lighting mode to one of the plurality of lighting modes; and

a rated power supplying unit to supply a rated power to the light source at a lighting starting time of the light source until a halogen cycle of the discharge tube is stabilized, and the control device switches the light source to the lighting mode set by the lighting mode setting unit after the halogen cycle of the discharge tube is stabilized,

the switching between the plurality of lighting modes being performed for one or more seconds.

8. (Currently Amended) A method of controlling the lighting of a light source, which is executed in a circuit to drive the light source that includes a discharge tube, the circuit including a control device to drive the light source and to switch the light source to a

plurality of lighting modes including a rated power mode and a power saving mode, the method comprising:

setting the lighting mode to one of the plurality of lighting modes;

supplying a rated power to the light source at a lighting starting time of the light source until a halogen cycle of the discharge tube is stabilized; and

switching the light source to the lighting mode set in the setting of the lighting mode after the halogen cycle of the discharge tube is stabilized, the switching between the plurality of lighting modes being performed for one or more seconds.

9. (Previously Presented) A computer readable program for executing a method of controlling the lighting of a light source, the method being executed in a circuit to drive the light source that includes a discharge tube, the circuit including a control device to drive the light source and to switch the light source to a plurality of lighting modes including a rated power mode and a power saving mode, the program comprising:

a program for setting a lighting starting mode to one of the plurality of lighting modes;

a program for supplying a rated power to the light source at the lighting time of the light source until a halogen cycle of the discharge tube is stabilized; and

a program for switching the light source to the lighting mode set in the setting of the lighting mode after the halogen cycle of the discharge tube is stabilized, the switching between the plurality of lighting modes being performed for one or more seconds.